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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,775	11/18/2002	A. David Shay	20011.1010	2409

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EXAMINER
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BROWN, CHRISTOPHER J

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/065,775	<b>Applicant(s)</b> SHAY, A. DAVID	
	<b>Examiner</b> Christopher J. Brown	<b>Art Unit</b> 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12/2/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14,33,64,67-69 and 78 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14,33,64,67-69 and 78 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/24, 4/15, 6/02</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements.

See MPEP § 2172.01. The omitted elements are: Claim 1 states transmitting a packet to a destination node, then authenticating said packet, and finally releasing said packet to said destination node. It is unclear where the authentication of the transformed packet takes place, if as stated in lines 4-5 the packet had already been transmitted to the destination node. Appropriate correction is required. Claims 2-14, dependent on independent claim 1, are also rejected.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear whether the applicant intends to apply a “first array key index value” to transform a user identification, or whether the applicant actually intends to apply a “key from the first array”. The same applies to the second array key index value, also in claim 8. Clarification is required.

Claim 33 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention. The applicant uses the term “a transformed packet header” twice in claim 33, and also used the term “the transformed packet header” twice in claim 33. It is not clear if “the transformed packed header on line 7 of the claim refers to the first or second transformed packet header. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-6, 14, 33, 64, 69 and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen US 5,689,566 in view of Cunningham US 6,219,786.**

As per claims 1, 33, 64, and 78 Nguyen teaches initiating a request for network services by a source, (Col 3 lines 2 lines 63-66). Nguyen teaches constructing a transformed packet header and transmitting a synchronization packet with the transformed packet header to a destination node, (Col 3 lines 48-50, 55-57). Nguyen teaches reforming the transformed packet header at the destination node, (Col 4 lines 30-40).

Nguyen does not teach intermediate authentication of the packet.

Cunningham teaches a method to monitor network traffic and authenticate a received packet, (Col 6 lines 12-15, Col 7 line 65- Col 8 line 3). Cunningham teaches releasing the packet if authenticated, (Col 9 lines 1-2).

It would have been obvious to one of ordinary skill in the art to use the secure data communications of Nguyen with the network monitoring and access control of Cunningham because the access control enhances internal security, (Cunningham Col 4 lines 50-54).

As per claim 2, Nguyen teaches transmitting an acknowledgment response with a transformed header to the source node, (Col 4 lines 35-40).

As per claim 3, Nguyen teaches that the request is for a session connection with the destination node, (Col 2 lines 64-67).

As per claims 4, and 5, Cunningham teaches that source identifications including hardware addresses and user names are authenticated compared to values stored in the rules, (Col 8 lines 54-67).

It would have been obvious to one of ordinary skill in the art to use the secure data communications of Nguyen with the network monitoring and access control of Cunningham because the access control enhances internal security, (Cunningham Col 4 lines 50-54).

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As per claims, 6, 14, and 69 Nguyen teaches terminating the request if a source ID does not match the previously stored value, (Col 4 lines 17-24).

**Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen US 5,689,566 in view of Cunningham US 6,219,786 in view of Esbensen US 5,796,942**

As per claim 7, the previous Nguyen-Cunningham combination does not teach notifying a network administrator and storing the event in a database.

Esbensen teaches notifying an administrator in response to an incident, and storing the incident in a log, (Col 5 lines 16-25).

It would have been obvious to one of ordinary skill in the art to use the incident log of Esbensen with the previous Nguyen-Cunningham combination because it allows the administrator to review the attempted security breach.

**Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen US 5,689,566 in view of Cunningham US 6,219,786 in view of Edgett US 2004/0034771.**

As per claim 8, The previous Nguyen-Cunningham combination teaches transforming a user identification, (Nguyen Col 3 lines 55-60). Nguyen-Cunningham teaches applying a second transform to the transformed user identification, (Nguyen Col 3 lines 63-67).

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Nguyen-Cunningham teaches forming a packet header out of the transformations and transmitting them, (Nguyen Col 4 lines 1-8).

Nguyen-Cunningham does not teach key indexes.

Edgett teaches an encryption system using key index values, and applying said key index to a transformations to source identifiers, [0052].

It would have been obvious to use the key index system of Edgett with the previous combination of Nguyen-Cunningham because the key index system prevents any keys from being transmitted.

As per claim 9, the previous Nguyen-Cunningham combination teaches applying transformation routines to allow detection of packet manipulation, (Nguyen Col 3 lines 55-57, Col 4 lines 1,2).

Edgett teaches an encryption system using key index values, and applying said key index to a transformations to source identifiers, [0052].

It would have been obvious to use the key index system of Edgett with the previous combination of Nguyen-Cunningham because the key index system prevents any keys from being transmitted.

**Claims 10-12, and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen US 5,689,566 in view of Cunningham US 6,219,786 in view of Porras US 2003/0088791**

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As per claims 10-12, and 67 the previous Nguyen-Cunningham combination does not teach determining the protocol type of the packet, including synchronization packets, and proceeding with further processing if the packet is a synchronization packet.

Porras teaches monitoring traffic based on protocol [0032]. Porras teaches monitoring as processing syn packets [0073].

It would have been obvious to one of ordinary skill in the art to use the system of Nguyen-Cunningham with the network monitoring of Porras, because Porras allows greater flexibility and control options to prevent network intrusion.

**Claims 13, and 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen US 5,689,566 in view of Cunningham US 6,219,786 in view of Brewer US 6,219,787**

As per claims 13, and 68 the previous Nguyen-Cunningham combination does not teach an exception module.

Brewer teaches that if a source is not a trusted source exception processing is enabled, (Col 21 lines 47-50).

It would have been obvious to one of ordinary skill in the art to use the exception of Brewer with the system of Nguyen-Cunningham to prevent any security violations.



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***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher J. Brown whose telephone number is (571)272-3833. The examiner can normally be reached on 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jaques Louis Jaques can be reached on (571)272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher J. Brown

4/16/06

